

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL ☒ DEEPEN ☐ PLUG BACK ☐NAME OF COMPANY OR OPERATOR DNR-GEOL SURVEY DATE SEPT 77Box 250RollaMO

Address

City

State

DESCRIPTION OF WELL AND LEASE

Name of lease

ERUN TS

Well number

34

Elevation (ground)

926

WELL LOCATION

(give footage from section lines)

24ft. from (N) (S) sec. line128ft. from (E) (W) sec. line

WELL LOCATION

Section 22Township 33Range 31

County

BARTON

Nearest distance from proposed location to property or lease line:

Distance from proposed location to nearest drilling, completed or applied - for well on the same lease:

NA

feet

feet

Proposed depth:

175

Rotary or Cable tools

Rotary(Air)

Approx. date work will start

Number of acres in lease:

NA

Number of wells on lease, including this well, completed in or drilling to this reservoir: _____

Number of abandoned wells on lease: _____

If lease, purchased with one or more wells drilled, from whom purchased:

Name

NA

No. of Wells: producing _____

inactive _____

Address

abandoned _____

Status of Bond

Single Well ☐

Amt. _____

Blanket Bond ☐

Amt. _____

☐ ON FILE☐ ATTACHED

Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone and expected new producing zone) use back of form if needed.

STRAT TEST

Proposed casing program:

amt.

size

wt./ft.

cem.

Approved casing - To be filled in by State Geologist

amt.

size

wt./ft.

cem.

I, the undersigned, state that I am the _____ of the _____ (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature _____

Permit Number: 20026Approval Date: SEPT 1977Approved By: Wallace B. House

Note: This Permit not transferable to any other person or to any other location.

Remit two copies to: Missouri Oil and Gas Council
P.O. Box 250 Rolla, Mo. 65401

One will be returned.

Approval of this permit by the Oil and Gas Council does not constitute endorsement of the geologic merits of the proposed well nor endorsement of the qualifications of the permittee.

☒ SAMPLES REQUIRED☐ SAMPLES NOT REQUIRED

WATER SAMPLES REQUIRED @:

MISSOURI OIL AND GAS COUNCIL
WELL LOCATION PLAT

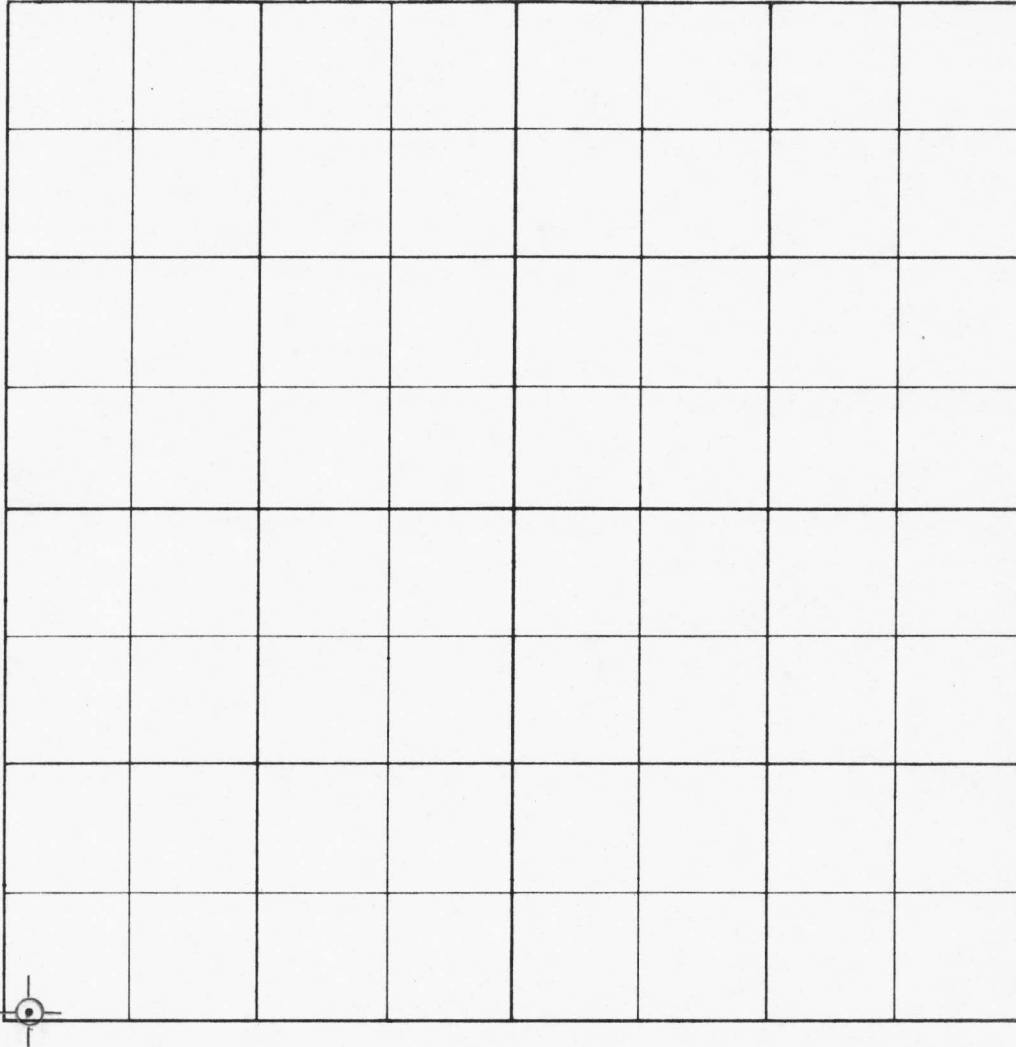
Form OGC - 4

Owner: DNR - GEOL SURVEY

Lease Name: ERDA TS NO. 34 County, BARTON

24 feet from (N) (S) line and 128 feet from (E) (W) line of Sec. 22 Twp. 33 Range 31

SCALE
1" = 1000'



REMARKS: _____

INSTRUCTIONS

On the above plat, show distance of the proposed well from the two nearest lease and section lines, and from the nearest well on the same lease completed in or drilling to the same reservoir. If the location requested is not in conformance with the applicable well-spacing rules, show all off-setting wells to the proposed well. Do not confuse survey lines with lease lines. See rule 7 - 3 (b) for survey requirements.

(SEAL)

Remit two copies to: Missouri Oil and Gas Council
P.O. Box 250 Rolla, Mo. 65401
One will be returned.

Registered Land Surveyor

TEST BORING LOG

Project E.R.D.A.
Southwest corner of Section 22
 Address T. 33 North, R 31 West
 City & State _____

Boring No. 34 Sheet 1 of 3
 Surface Elevation _____ Offset _____
 Date Started 9/2/77 Completed 9/6/77
 Driller D. Dickerson Rig 54

Abbreviations: A.O. - Auger Only R.B. - Rock Bit C.W. - Core Water
 H.A. - Hollow Auger S.S. - Split Spoon C.A. - Core Air
 W.B. - Wash Bore S.T. - Shelby Tube F.B. - Finger Bit

Sec. 22, T. 33N., R. 31W.

DEPTH		METHOD	PENETRATION RECORD		CORE RECOVERY	SAMPLE DESCRIPTION COLOR-MATERIAL-MOISTURE-CLAY CONSISTENCY SAND DENSITY
FROM	TO		POCKET PENETRO-METER	NO. OF BLOWS		
0.0'	5.0'	AH				Yellowish brown shale
5.0'	10.0'	AH				Yellowish brown shale, light gray clay, light brown sandstone
10.0'	15.0'	AH				Yellowish brown shale, reddish brown, silty shale, brown sandstone, gray clay
15.0'	20.0'	AH				Light brown silty shale, Seville limestone
20.0'	25.0'	AH				Light gray silty shale, reddish brown sandstone
25.0'	30.0'	AH				Light gray silty shale, gray sandstone
30.0'	35.0'	AH				Dark gray shale
35.0'	40.0'	AH				Dark gray shale, coal at 38.5 to 41.0'
40.0'	45.0'	AH				Dark gray shale, layers of coal mixed with shale at 42 to 44'
45.0'	50.0'	AH				Medium gray shale, coal at 46' about 3"
50.0'	55.0'	AH				Light gray shale, light gray sandstone
55.0'	60.0'	AH				Light gray shale, light gray sandstone
60.0'	65.0'	AH				Same
65.0'	70.0'	AH				Same
70.0'	75.0'	AH				Same
75.0'	80.0'	AH				Same

REMARKS: (Casing, Water Loss, Etc.) _____ Water Level _____ Time _____ Date _____ (Completion)

TEST BORING LOG

Project E.R.D.A.

Boring No. 34 Sheet 2 of 3

Surface Elevation _____ Offset _____

Address _____

Date Started _____ Completed _____

City & State _____

Driller _____ Rig _____

Abbreviations: A.O. - Auger Only R.B. - Rock Bit C.W. - Core Water
H.A. - Hollow Auger S.S. - Split Spoon C.A. - Core Air
W.B. - Wash Bore S.T. - Shelby Tube F.B. - Finger Bit

DEPTH		METHOD	PENETRATION RECORD		CORE RECOVERY	SAMPLE DESCRIPTION COLOR-MATERIAL-MOISTURE-CLAY CONSISTENCY SAND DENSITY
FROM	TO		POCKET PENETRO-METER	NO. OF BLOWS		
80.0'	85.0'	AH				Light gray sandstone & little brown shale
85.0'	90.0'	AH				Light gray sandstone
90.0'	95.0'	AH				Light gray sandstone, layers of dark gray shale
95.0'	100.0'	AH				Dark gray and light gray sandstone, w/ tr. of shale
100.0'	105.0'	AH				Dark gray and light gray sandstone w/tr. coal
105.0'	110.0'	AH				Black shale
110.0'	115.0'	AH				Coal at 111' about 6", light gray silty shale
115.0'	120.0'	AH				Black shale & dark gray silty shale
120.0'	125.0'	AH				Medium gray silty shale
125.0'	130.0'	AH				Black shale & medium gray silty shale
130.0'	135.0'	AH				Dark gray shale & medium gray silty shale
135.0'	140.0'	AH				Same
140.0'	145.0'	AH				Dark gray shale & medium gray silty shale, coal at 143', about 2 to 3"
145.0'	150.0'	AH				Underclay, light gray silty shale
150.0'	155.0'	AH				Black shale
155.0'	160.0'	AH				Same

REMARKS: (Casing, Water Loss, Etc.)

Water Level

Time

Date

(Completion)

TEST BORING LOG

Project E.R.D.A.

Boring No. 34 Sheet 3 of 3

Surface Elevation	Offset
-------------------	--------

Address _____

Date Started _____ Completed _____

City & State _____

Driller _____ Rig _____

Abbreviations:	A.O.	—	Auger Only	R.B.	—	Rock Bit	C.W.	—	Core Water
	H.A.	—	Hollow Auger	S.S.	—	Split Spoon	C.A.	—	Core Air
	W.B.	—	Wash Bore	S.T.	—	Shelby Tube	F.B.	—	Finger Bit

[illegible]

REMARKS: (Casing, Water Loss, Etc.)

Water Level

Time

Date _____

(Completion)

WILDCAT

STATE	FR & COMP MISSOURI	10-3-83	MAP NO.	S-T-R	22-33N-31W	S
OPER	DNR GEOLOGICAL SURVEY			SPOT	APP SW SW SW SW	INIT
	BOX 250, ROLLA, MO			CO	BARTON	S
WELL	34 ERDA - TS			ELEV	926 GR	FIN
CONTR	LAYNE-WESTERN			24' fs1, 128' fw1, Sec		
FIELD	WILDCAT					
IP	D&A			GR SPL TOPS:		
	API 24-011-20026			MISS 162 + 764		
SPUD 9-2-77, no surf csg				RTD 164 + 762		
RTD 164, log				TD IN MISS		
<u>D&A FIRST REPORTED AND COMPLETED 9-2-77</u>				COMP ISSUED 10-17-77		